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ABSTRACT

The present invention is directed to the recovery of a call signaling channel in connection with a realtime communication established using a packet data network. Specifically, in the event of the failure of an endpoint's current gatekeeper, this invention provides a fast mechanism for searching for an alternate gatekeeper with which the endpoint can re-establish its call signaling channel and hence can regain call service, including call features on existing calls. In accordance with an embodiment of the present invention, a lightweight registration request message is sent on the RAS channel to an alternate gatekeeper in response to the loss of an established call signaling channel, even though a keep alive signal is not then due. The lightweight RRQ message may be sent to individual gatekeepers on an alternate gatekeeper list, until a registration confirmation message is received. Alternatively, a lightweight RRQ message may be sent to all or a number of the gatekeepers on the alternate gatekeeper list simultaneously. A call signaling channel is then established between the first alternate gatekeeper to respond with a registration confirmation message, or to a selected gatekeeper where a number of gatekeepers provide an RCF message.